

THE MINERAL INDUSTRY OF SYRIA

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The Middle Eastern nation of Syria was a producer of dimension stone, fertilizers, gravel, industrial minerals, natural gas, oil, sand, and semimanufactured minerals. Industrial minerals produced in recent years included gypsum, phosphate rock, salt, silica sand, and sulfur. Semimanufactured goods included cement, glass, phosphoric acid, steel, and sulfuric acid.

Syria's nominal gross domestic product (GDP) based on purchasing power parity was estimated to be \$67.6 billion. The per capita GDP based on purchasing power parity was about \$3,700. The real GDP increased by 3.4% in 2004 and 2.6% in 2003. In 2003, extractive industries accounted for 19.3% of the GDP; manufacturing, 3.7%; construction, 3.5%; and utilities, 1.7% (International Monetary Fund, 2005a, p. 4; 2005b, p. 196; 2005¹).

The production of semimanufactured steel rose with the opening of new steel mills in 2002 and 2003. Syria's four privately owned steel plants produced semimanufactured steel at a rate of 700,000 metric tons per year in early 2004. In the first 9 months of 2004, Joud International produced 75,000 metric tons (t) of rebar. The state-owned General Company for Iron and Steel Products produced 58,000 t of billet and 53,000 t of rebar in 2003. In 2004, the company planned to increase billet production to 60,000 t, and rebar, to 78,000 t (MEsteel.com, 2004[§], 2005[§]).

The state-owned General Organization for Cement and Building Materials (GOCBM) and Military Housing Cement Group produced nearly 5.5 million metric tons per year (Mt/yr) of cement. GOCBM planned to increase national cement production capacity to 8 Mt/yr by 2008. By late 2005, Edhasse Sanat Corp. of Iran planned to complete a new cement plant in Hama with a capacity of 1 Mt/yr. This project was expected to cost \$198 million. GOCBM also planned to build a new plant at Hama with a capacity of 1 Mt/yr (Middle East Economic Digest, 2003).

At the end of 2004, Syria's proven natural gas reserves were estimated to be about 370 billion cubic meters. The Government expected marketable natural gas production to rise to about 12.8 billion cubic meters within the next few years. The state-owned Syrian Petroleum Company (SPC) planned to develop 15 new gasfields in the Palmyra region and two new gas-processing plants. The plant near Homs would have a capacity of 2.2 billion cubic meters per year, and the plant at al-Thawra, 1.1 billion cubic meters per year (Arab Petroleum Research Center, 2004b, p. 445; BP plc, 2005, p. 20).

By May 2005, Lebanon was expected to start importing natural gas from Syria as part of the Arab Gasline project. In the first year of the project, imports were expected to be about 550 million cubic meters. Imports would rise gradually to nearly 1.1 billion cubic meters per year, and in a subsequent phase of the project, imports could rise to 2.2 billion cubic meters per year (Arab Petroleum Research Center, 2004a; Daily Star, 2005).

At the end of 2004, Syria's reserves of crude petroleum amounted to 3.2 billion barrels. Production of crude petroleum declined to 536,000 barrels per day (bbl/d) in 2004 from 564,000 bbl/d in 2003 and 579,000 bbl/d in 1999. By October 2004, production had fallen to the rate of 475,000 bbl/d. The al-Furat Petroleum Company (AFPC) was Syria's leading producer of crude petroleum; AFPC and Deir ez-Zor Petroleum Company produced light crude. SPC produced heavy crude. In 2004, the Government signed production-sharing agreements with IPR Mediterranean Exploration Ltd. for Block 24 and with Tanganyika Oil Company of Canada for the Tishreen and the Shaikh Mansour oilfields. Tishreen produced about 6,000 bbl/d; the development of Oudeh, Shaikh Mansour, and Tishreen was expected to produce an additional 30,000 bbl/d (Middle East Economic Digest, 2004; BP plc, 2005, p. 4, 6).

In 2003, Syria's production of electricity amounted to 29,533 gigawatthours (GWh) compared with 28,013 GWh in 2002 and 22,823 GWh in 1999. Natural gas accounted for 53% of the power generated in 2003; petroleum products, 37%; and hydroelectric plants, 10%. Domestic consumption of natural gas for power generation increased to nearly 4.13 billion cubic meters in 2003 from 2.92 billion cubic meters in 1999 (International Monetary Fund, 2005a, p. 22).

Outlook

Syria's production of crude petroleum has declined in recent years and is likely to continue falling in the near future. Production of natural gas is expected to increase because of higher domestic consumption and the Arab Gasline project. The expansion of the construction sector is likely to lead to higher cement production.

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¹References that include a section mark (§) are found in the Internet References Cited section.

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TABLE 1
SYRIA: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity	2000	2001 ^e	2002 ^e	2003 ^e	2004 ^e
Cement, hydraulic	thousand metric tons	4,631 ^r	5,428 ^{r, 2}	5,450 ^r	5,450
Gas, natural:					
Gross	million cubic meters	6,934	7,800 ^r	9,100 ^r	9,300 ^r
Dry	do.	3,886	5,845 ^{r, 2}	6,805 ^{r, 2}	6,955 ^{r, 2}
Gypsum		333,000	370,000 ^r	370,000 ^r	370,000 ^r
Natural gas liquids:					
Propane	thousand 42-gallon barrels	511	525	760	760
Butane	do.	1,666	1,700 ^r	2,500 ^r	2,500 ^r
Pentanes	do.	44	45	70 ^r	70
Total	do.	2,221	2,270 ^r	3,330 ^r	3,330
Nitrogen:					
N content of ammonia		91,100	138,400 ²	142,800 ²	161,100 ²
N content of urea		56,600	97,700 ²	88,500 ²	90,700 ²
Petroleum:					
Crude	thousand 42-gallon barrels	202,000 ²	213,500 ^{r, 2}	199,700 ^{r, 2}	205,900 ^{r, 2}
Refinery products:					
Liquefied petroleum gas	do.	1,633	1,310 ²	1,430 ²	1,370 ²
Gasoline	do.	8,678	11,400 ²	12,500 ²	11,900 ²
Naphtha	do.	4,419	4,400	4,400	4,400
Jet fuel	do.	1,457	1,500	1,500	1,500
Kerosene	do.	742	750	800	750
Distillate fuel oil	do.	33,176	31,000	33,000	32,000
Residual fuel oil	do.	27,467	26,800 ²	28,900 ²	27,700 ²
Asphalt	do.	2,332	2,300	2,300	2,300
Other	do.	826	800	800	800
Total	do.	80,730	80,300	85,600	82,700
Phosphate:					
Phosphate rock, mine output:					
Gross weight	thousand metric tons	2,166	2,043 ²	2,483 ²	2,414 ²
P ₂ O ₅ content	do.	646	613 ²	745	725
P ₂ O ₅ equivalent:					
Phosphatic fertilizers		113,000	69,000	123,000 ²	91,000 ²
Phosphoric acid		89,000	57,000	102,000 ²	73,000 ²
Salt		106,130	190,000 ²	146,000 ²	146,000
Steel:					
Crude		70,000 ^e	70,000	70,000	70,000
Semimanufactured		60,000	60,000	400,000 ^r	600,000 ^r
Stone:					
Dolomite, refractory grade	thousand metric tons	4,912	5,000	5,000	5,000
Gravel and crushed rock	do.	5,549	6,000	6,000	6,000
Marble blocks		377	347 ²	340 ²	340
Sand:					
Construction	thousand cubic meters	395	450	450	450
Industrial	thousand metric tons	813	850	850	850
Volcanic tuff	do.	507	650	650	650
Sulfur					
Byproduct of petroleum and natural gas		16,660	16,000 ^r	16,000 ^r	15,000 ^r
Sulfuric acid:					
Gross weight		318,000	239,000 ²	344,000 ²	250,000 ²
S content		104,000	78,000 ²	112,000 ²	82,000 ^{r, 2}

^eEstimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. ^PPreliminary. ^rRevised.

¹Table includes data available through September 20, 2005.

²Reported figure.

TABLE 2
SYRIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2004

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies	Location of main facilities	Annual capacity
Cement		Tartous Company for Cement & Building Materials ¹	Tartous	1,802.
Do.		al-Chaba Cement & Building Materials ¹	Aleppo	923.
Do.		Arabian Cement Co. for Cement ¹	do.	898.
Do.		Adra Co. for Cement and Building ¹	Adra	845.
Do.		Syrian Co. for Manufacturing Cement ¹	Hama	432.
Do.		National Co. for Manufacturing of Cement ¹	Dummar	190.
Do.		Rastan Co. for Cement and Building Materials ¹	Rastan	131.
Do.		Military Housing Cement Group (Government, 100%)	Musselemieh	NA.
Natural gas	million cubic meters	ConocoPhillips Company	Processing plant at Deir ez-Zor	4,750.
Do.	do.	al-Furat Petroleum Company (Syrian Petroleum Company, 50%; Deminex GmbH, 18.8%; Pecten Syria Petroleum, 15.6%; Royal Dutch/Shell, 15.6%)	Processing plant at Omar	2,400.
Do.	do.	Syrian Petroleum Company (Government, 100%)	Processing plant at Palmyra	2,200.
Do.	do.	do.	Processing plant at Jebissa	1,060.
Do.	do.	do.	Processing plant at Suwaidiyah	240.
Nitrogen:				
Ammonia and urea ²		General Fertilizers Company (subsidiary of General Organization for Chemical Industries)	Homs	256 ammonia; 137 urea.
Fertilizers		do.	do.	109.
Petroleum:				
Crude	thousand 42-gallon barrels	al-Furat Petroleum Company	al-Thayyem	20,000.
Do.	do.	do.	al-Izba	18,300.
Do.	do.	do.	Omar/Omar North	14,600.
Do.	do.	do.	Maleh/Azraq	11,000.
Do.	do.	do.	Sijan	11,000.
Do.	do.	do.	Jarnof/Saban	9,100.
Do.	do.	do.	al-Ward	7,300.
Do.	do.	do.	Tanak	6,600.
Do.	do.	Syrian Petroleum Company	Suwaidiyah, Jebissa, and Karatchok	45,600.
Do.	do.	Deir-ez Zor Petroleum Company (Syrian Petroleum Company, 50%, and Total S.A., 50%)	Qahar	10,200.
Do.	do.	do.	Jafra	4,700.
Do.	do.	do.	al-Mazraa and Attala North	3,700.
Do.	do.	al-Khabur Petroleum Co. (Syrian Petroleum Company, 50%)	Kishma	5,800.
Do.	do.	Tanganyika Oil Co.	Tishreen	2,190.
Refined:	do.	Banias Refinery Company (Government, 100%)	Banias	49,300.
Do.	do.	Homs Refinery Company (Government, 100%)	Homs	39,100.
Phosphate:				
Phosphate rock		General Company for Phosphate and Mines (Government, 100%)	Eastern A	1,150.
Do.		do.	Kneifis	800.
Do.		do.	Eastern B	700.
Phosphatic fertilizers		General Fertilizers Company	Homs	450
Phosphoric acid		do.	do.	165.
Salt		General Company for Phosphate and Mines	Deir al-Zour	72.
Steel:				
Billet		General Company for Iron and Steel Products (Government, 100%)	Hama	60.
Rolled		Merri Family	Tartous	300.
Do.		Arab Steel Co.	Lattakia	250.
Do.		Joud International	do.	150.
Do.		General Company for Iron and Steel Products	Hama	78.
Sulfur	metric tons	Homs Refinery Co.	Homs	14,600.
Do.	do.	do.	Processing plant at Suwaidiyah	7,410.
Do.	do.	Syrian Petroleum Company	Processing plant at Jebissa	7,300.
Sulfuric acid		General Fertilizers Company	Homs	560.

NA Not available.

¹Subsidiary of General Organization for Cement and Building Materials, which is 100% Government owned.

²Expressed in nitrogen equivalent.